

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P246191

Luminaire Tested: **LSR8B50D010 EC8B50835 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B50835 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5519.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

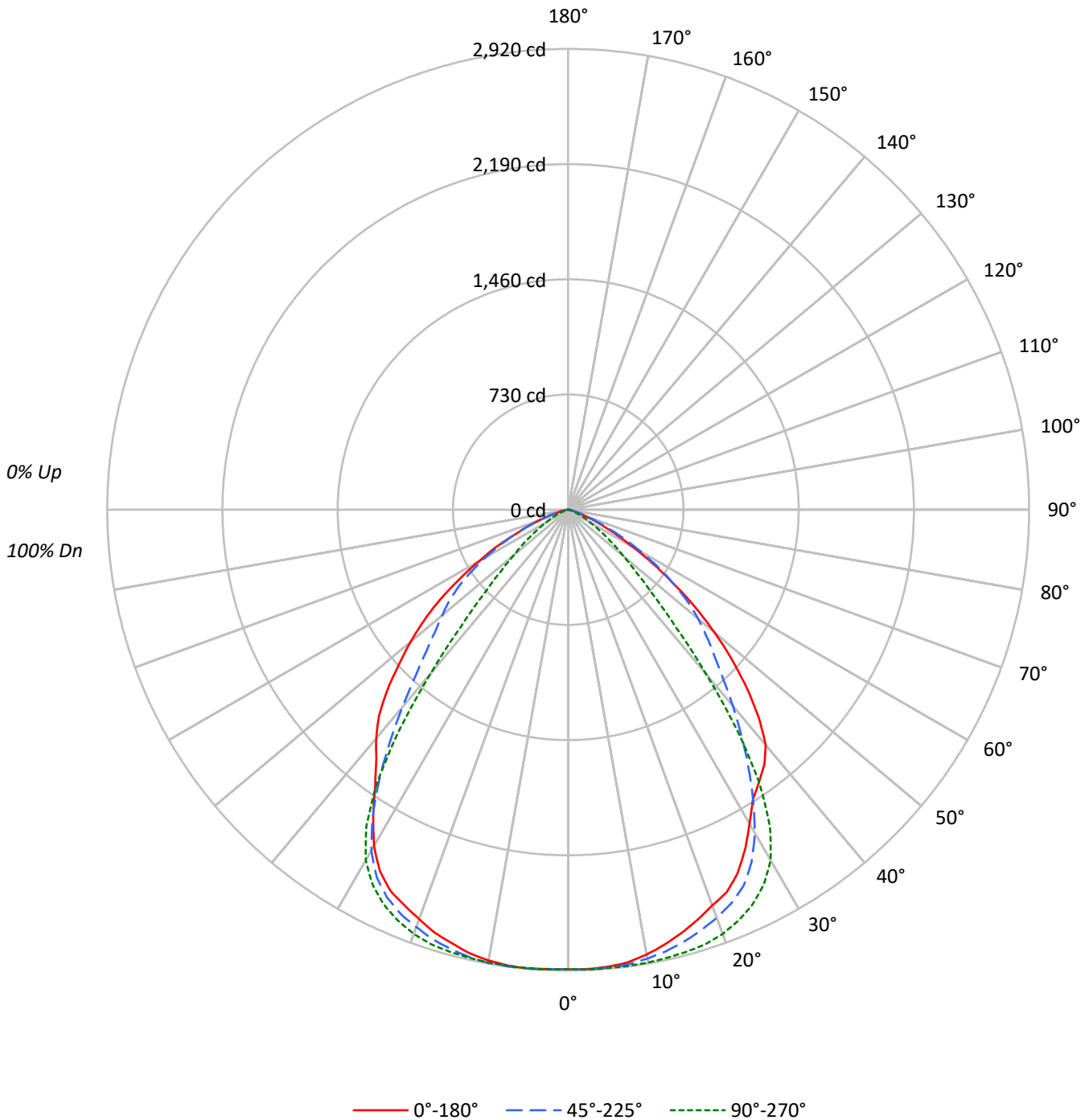
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	89792	89792	89792
5°	89990	90234	90330
10°	89612	91228	90836
15°	88618	92561	90814
20°	87555	93862	90580
25°	86418	93971	90674
30°	81757	91328	87600
35°	79316	79373	80197
40°	78334	54613	76132
45°	69801	32785	70751
50°	58037	21818	62537
55°	43525	15042	53025
60°	29498	10022	40007
65°	17789	6501	27486
70°	9863	3525	16914
75°	4468	1489	8757
80°	3889	1669	6109
85°	4423	2194	6085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.9	5.0
10°-20°	807.1	14.6
20°-30°	1225.0	22.2
30°-40°	1286.6	23.3
40°-50°	964.6	17.5
50°-60°	618.9	11.2
60°-70°	264.8	4.8
70°-80°	62.6	1.1
80°-90°	11.6	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2310.0	41.9
0°-40°	3596.5	65.2
0°-60°	5180.1	93.9
0°-90°	5519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5519.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2912	2912	2912	2912	2912	
5°	2907	2912	2915	2920	2918	276
15°	2776	2834	2899	2881	2845	783
25°	2540	2629	2762	2712	2665	1160
35°	2107	1990	2108	2084	2130	1322
45°	1601	1308	752	1271	1622	1226
55°	810	810	280	844	986	734
65°	244	288	89	370	377	260
75°	38	44	12	75	74	55
85°	12	8	6	12	17	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9
2.5°	2913.5	2916.6	2915.1	2915.1	2913.5	2915.1	2915.1	2918.2	2918.2	2915.1	2913.5
5°	2907.2	2910.4	2910.4	2907.2	2907.2	2915.1	2910.4	2913.5	2913.5	2911.9	2911.9
7.5°	2893.2	2893.2	2899.4	2894.8	2894.8	2899.4	2897.9	2901.0	2904.1	2905.7	2905.7
10°	2861.9	2865.0	2866.6	2866.6	2868.2	2872.8	2876.0	2882.3	2885.4	2888.5	2890.1
12.5°	2822.9	2827.5	2829.1	2827.5	2832.2	2838.5	2846.3	2854.1	2858.8	2865.0	2869.7
15°	2775.9	2775.9	2779.1	2783.8	2786.9	2796.3	2804.1	2813.5	2826.0	2833.8	2841.6
17.5°	2724.4	2727.5	2732.2	2732.2	2738.5	2754.1	2758.8	2772.8	2786.9	2794.7	2810.4
20°	2668.1	2671.2	2675.9	2679.1	2686.9	2699.4	2708.7	2721.2	2736.9	2751.0	2766.6
22.5°	2624.3	2618.1	2621.2	2624.3	2632.2	2643.1	2654.0	2669.7	2685.3	2699.4	2715.0
25°	2539.9	2541.5	2546.2	2549.3	2558.7	2568.1	2580.6	2599.3	2613.4	2629.0	2646.2
27.5°	2425.8	2427.4	2435.2	2435.2	2443.0	2458.7	2466.5	2482.1	2500.9	2516.5	2536.8
30°	2296.1	2299.2	2299.2	2305.5	2310.1	2318.0	2325.8	2341.4	2350.8	2364.9	2393.0
32.5°	2177.3	2180.4	2178.9	2177.3	2172.6	2171.1	2169.5	2172.6	2175.8	2180.4	2191.4
35°	2107.0	2099.2	2092.9	2082.0	2069.5	2053.8	2039.8	2021.0	2003.8	1989.7	1974.1
37.5°	2039.8	2038.2	2028.8	2013.2	1988.2	1960.1	1927.2	1886.6	1845.9	1802.2	1760.0
40°	1946.0	1941.3	1933.5	1911.6	1883.4	1849.1	1805.3	1755.3	1689.6	1622.4	1553.7
42.5°	1786.5	1788.1	1778.7	1761.5	1735.0	1702.1	1656.8	1602.1	1531.8	1452.0	1363.0
45°	1600.6	1600.6	1597.4	1583.3	1564.6	1538.0	1503.6	1458.3	1389.6	1308.2	1212.9
47.5°	1406.7	1408.3	1403.6	1400.5	1392.7	1375.5	1350.5	1316.1	1267.6	1189.5	1094.1
50°	1209.8	1209.8	1217.6	1216.0	1216.0	1209.8	1198.9	1178.5	1136.3	1073.8	984.7
52.5°	1012.8	1016.0	1020.7	1026.9	1034.7	1047.2	1034.7	1025.3	998.8	950.3	873.7
55°	809.6	812.8	820.6	831.5	840.9	853.4	856.5	856.5	842.5	809.6	751.8
57.5°	636.2	631.5	637.7	647.1	659.6	672.1	681.5	692.4	690.9	669.0	622.1
60°	478.3	479.9	484.5	493.9	503.3	514.2	526.7	536.1	540.8	529.9	500.2
62.5°	348.6	348.6	354.8	364.2	368.9	384.5	392.3	397.0	401.7	400.1	381.4
65°	243.8	246.9	250.1	254.8	259.5	268.8	273.5	282.9	286.0	287.6	273.5
67.5°	171.9	167.2	170.4	173.5	178.2	184.5	193.8	193.8	198.5	198.5	189.1
70°	109.4	109.4	111.0	115.7	118.8	120.4	123.5	126.6	131.3	129.7	129.7
72.5°	73.5	71.9	73.5	75.0	76.6	81.3	81.3	82.8	86.0	87.5	81.3
75°	37.5	39.1	42.2	40.7	45.3	42.2	43.8	48.5	46.9	43.8	43.8
77.5°	31.2	31.2	31.2	29.7	32.8	32.8	31.2	34.4	32.8	32.8	31.2
80°	21.9	23.4	21.9	20.3	21.9	20.3	20.3	20.3	20.3	20.3	18.7
82.5°	17.2	14.1	15.6	14.1	15.6	15.6	14.1	12.5	12.5	14.1	12.5
85°	12.5	9.4	10.9	10.9	9.4	9.4	9.4	9.4	9.4	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.2	6.2	6.2	4.7	6.2	6.2	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9
2.5°	2916.6	2915.1	2918.2	2916.6	2916.6	2915.1	2916.6	2915.1	2918.2	2911.9	2913.5
5°	2916.6	2913.5	2915.1	2916.6	2918.2	2915.1	2915.1	2915.1	2918.2	2915.1	2916.6
7.5°	2910.4	2908.8	2913.5	2916.6	2915.1	2913.5	2916.6	2915.1	2918.2	2916.6	2919.7
10°	2897.9	2899.4	2902.6	2907.2	2908.8	2910.4	2913.5	2913.5	2918.2	2911.9	2915.1
12.5°	2879.1	2885.4	2893.2	2896.3	2902.6	2902.6	2905.7	2907.2	2910.4	2908.8	2913.5
15°	2855.7	2863.5	2872.8	2880.7	2888.5	2893.2	2897.9	2899.4	2904.1	2899.4	2901.0
17.5°	2827.5	2836.9	2851.0	2860.3	2872.8	2877.6	2883.8	2886.9	2891.6	2888.5	2890.1
20°	2788.4	2799.4	2815.0	2829.1	2836.9	2847.8	2855.7	2860.3	2863.5	2860.3	2861.9
22.5°	2733.7	2749.4	2769.7	2780.6	2796.3	2805.7	2807.2	2818.2	2826.0	2818.2	2821.3
25°	2669.7	2685.3	2700.9	2724.4	2738.5	2749.4	2760.3	2761.9	2769.7	2768.1	2766.6
27.5°	2563.4	2583.7	2610.3	2629.0	2647.8	2665.0	2677.5	2680.6	2688.4	2685.3	2686.9
30°	2418.0	2439.9	2464.9	2494.6	2521.2	2538.4	2554.0	2564.9	2572.7	2568.1	2566.5
32.5°	2211.7	2233.6	2260.2	2289.8	2321.1	2346.1	2364.9	2379.0	2388.3	2385.2	2377.4
35°	1975.7	1981.9	1999.1	2022.6	2049.1	2075.7	2092.9	2108.5	2119.5	2122.6	2122.6
37.5°	1733.4	1713.1	1700.6	1700.6	1716.2	1727.1	1742.8	1752.2	1769.4	1775.6	1780.3
40°	1498.9	1452.0	1408.3	1375.5	1353.6	1352.0	1352.0	1356.7	1372.3	1392.7	1411.4
42.5°	1289.5	1214.5	1147.3	1086.3	1042.6	1017.5	1006.6	1008.2	1020.7	1039.4	1070.7
45°	1122.3	1028.5	944.1	870.6	811.2	772.1	753.4	751.8	761.2	783.1	817.5
47.5°	992.5	892.5	797.1	712.7	648.7	606.5	584.6	578.3	584.6	604.9	645.5
50°	884.7	781.5	683.1	595.5	526.7	483.0	462.6	454.8	462.6	479.9	520.5
52.5°	784.6	678.4	586.1	501.7	428.3	390.7	368.9	364.2	368.9	389.2	422.0
55°	669.0	578.3	487.7	403.3	339.2	301.7	284.5	279.8	284.5	303.2	337.6
57.5°	554.9	476.7	397.0	320.4	265.7	232.9	217.3	211.0	221.9	234.4	275.1
60°	448.6	386.1	318.8	251.7	206.3	176.6	164.1	162.5	165.7	181.3	209.4
62.5°	351.7	300.1	246.9	192.3	154.7	142.2	126.6	125.1	128.2	137.5	159.4
65°	253.2	220.4	179.8	140.7	111.0	93.8	87.5	89.1	92.2	98.5	118.8
67.5°	176.6	153.2	125.1	98.5	76.6	68.8	62.5	61.0	62.5	73.5	84.4
70°	118.8	104.7	84.4	75.0	53.2	42.2	43.8	39.1	45.3	45.3	54.7
72.5°	78.1	68.8	56.3	43.8	37.5	29.7	29.7	28.1	31.2	32.8	40.7
75°	40.7	31.2	31.2	21.9	15.6	7.8	14.1	12.5	10.9	12.5	15.6
77.5°	28.1	23.4	21.9	17.2	15.6	12.5	12.5	12.5	12.5	14.1	15.6
80°	17.2	17.2	12.5	10.9	9.4	7.8	9.4	9.4	9.4	9.4	10.9
82.5°	10.9	9.4	9.4	7.8	7.8	6.2	6.2	6.2	6.2	6.2	9.4
85°	9.4	6.2	6.2	4.7	6.2	10.9	4.7	6.2	6.2	6.2	4.7
87.5°	3.1	4.7	4.7	4.7	3.1	1.6	3.1	4.7	4.7	7.8	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9	2911.9
2.5°	2916.6	2918.2	2918.2	2916.6	2916.6	2913.5	2919.7	2915.1	2916.6	2922.9	2918.2
5°	2919.7	2921.3	2921.3	2919.7	2919.7	2919.7	2921.3	2921.3	2919.7	2918.2	2921.3
7.5°	2926.0	2924.4	2924.4	2921.3	2921.3	2918.2	2921.3	2916.6	2919.7	2916.6	2921.3
10°	2918.2	2919.7	2918.2	2916.6	2916.6	2915.1	2915.1	2910.4	2911.9	2907.2	2910.4
12.5°	2913.5	2911.9	2911.9	2908.8	2905.7	2902.6	2901.0	2896.3	2896.3	2885.4	2890.1
15°	2901.0	2902.6	2897.9	2891.6	2888.5	2880.7	2877.6	2871.3	2865.0	2857.2	2858.8
17.5°	2890.1	2885.4	2879.1	2872.8	2860.3	2854.1	2847.8	2838.5	2835.3	2826.0	2822.9
20°	2857.2	2854.1	2846.3	2835.3	2827.5	2813.5	2807.2	2797.8	2790.0	2780.6	2775.9
22.5°	2815.0	2811.9	2802.5	2791.6	2779.1	2772.8	2766.6	2749.4	2741.6	2732.2	2730.6
25°	2761.9	2757.2	2747.8	2735.3	2729.0	2711.9	2705.6	2693.1	2690.0	2680.6	2679.1
27.5°	2680.6	2674.4	2663.4	2647.8	2636.8	2625.9	2619.7	2610.3	2607.2	2597.8	2596.2
30°	2558.7	2550.9	2529.0	2522.8	2504.0	2493.0	2493.0	2480.5	2482.1	2475.9	2475.9
32.5°	2366.4	2353.9	2336.7	2324.2	2311.7	2305.5	2305.5	2300.8	2303.9	2303.9	2307.1
35°	2111.7	2094.5	2085.1	2077.3	2077.3	2083.5	2102.3	2107.0	2116.4	2124.2	2130.4
37.5°	1785.0	1783.4	1794.4	1803.7	1827.2	1853.8	1886.6	1914.7	1941.3	1960.1	1978.8
40°	1431.7	1470.8	1502.1	1545.9	1581.8	1633.4	1692.8	1741.2	1786.5	1819.4	1853.8
42.5°	1117.6	1167.6	1233.2	1297.3	1361.4	1431.7	1509.9	1577.1	1636.5	1681.8	1717.8
45°	870.6	939.4	1019.1	1100.4	1183.2	1270.8	1352.0	1420.8	1483.3	1530.2	1566.2
47.5°	701.8	776.8	867.5	956.6	1050.4	1142.6	1233.2	1292.6	1344.2	1381.7	1414.6
50°	579.9	659.6	755.0	856.5	950.3	1042.6	1120.7	1178.5	1220.7	1253.6	1273.9
52.5°	484.5	568.9	670.5	772.1	865.9	950.3	1020.7	1064.4	1098.8	1122.3	1141.0
55°	400.1	481.4	576.8	672.1	764.3	844.0	901.9	934.7	961.2	975.3	986.3
57.5°	326.7	401.7	489.2	576.8	656.5	722.1	767.5	800.3	812.8	823.7	822.2
60°	256.4	326.7	406.4	481.4	550.2	603.3	636.2	654.9	664.3	669.0	665.8
62.5°	201.6	265.7	326.7	392.3	442.3	487.7	518.9	518.9	523.6	525.2	529.9
65°	150.0	198.5	251.7	300.1	340.7	370.4	387.7	392.3	398.6	397.0	393.9
67.5°	111.0	146.9	186.0	221.9	250.1	268.8	281.3	292.3	290.7	287.6	286.0
70°	76.6	100.0	134.4	156.3	176.6	195.4	198.5	200.1	201.6	203.2	200.1
72.5°	53.2	70.3	89.1	107.9	120.4	128.2	136.0	137.5	137.5	137.5	136.0
75°	26.6	36.0	53.2	61.0	71.9	75.0	81.3	81.3	86.0	79.7	78.1
77.5°	23.4	28.1	37.5	43.8	48.5	53.2	54.7	59.4	57.8	54.7	56.3
80°	14.1	17.2	23.4	26.6	32.8	34.4	36.0	37.5	36.0	37.5	37.5
82.5°	10.9	12.5	15.6	15.6	20.3	20.3	21.9	21.9	23.4	23.4	23.4
85°	6.2	10.9	9.4	18.7	12.5	12.5	15.6	18.7	15.6	15.6	18.7
87.5°	6.2	6.2	4.7	6.2	6.2	6.2	7.8	9.4	9.4	10.9	9.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P246191

CATALOG NUMBER: LSR8B50D010 EC8B50835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2911.9	2911.9	2911.9	2911.9
2.5°	2916.6	2919.7	2915.1	2913.5
5°	2921.3	2921.3	2918.2	2918.2
7.5°	2921.3	2921.3	2916.6	2913.5
10°	2908.8	2908.8	2904.1	2901.0
12.5°	2885.4	2885.4	2883.8	2879.1
15°	2855.7	2855.7	2849.4	2844.7
17.5°	2815.0	2818.2	2810.4	2810.4
20°	2771.3	2769.7	2763.5	2760.3
22.5°	2725.9	2722.8	2721.2	2711.9
25°	2677.5	2674.4	2669.7	2665.0
27.5°	2594.7	2593.1	2588.4	2582.1
30°	2468.0	2466.5	2460.2	2460.2
32.5°	2303.9	2302.3	2296.1	2297.7
35°	2133.5	2139.8	2136.7	2130.4
37.5°	1991.3	1996.0	1999.1	1996.0
40°	1872.5	1886.6	1888.2	1891.3
42.5°	1745.9	1764.7	1770.9	1774.0
45°	1594.3	1611.5	1625.6	1622.4
47.5°	1439.5	1452.0	1464.6	1455.2
50°	1291.1	1298.9	1303.6	1303.6
52.5°	1150.4	1150.4	1148.8	1150.4
55°	989.4	989.4	983.2	986.3
57.5°	820.6	823.7	819.0	811.2
60°	664.3	656.5	653.3	648.7
62.5°	517.4	517.4	506.4	520.5
65°	387.7	382.9	378.2	376.7
67.5°	281.3	279.8	275.1	273.5
70°	198.5	192.3	190.7	187.6
72.5°	132.9	132.9	129.7	129.7
75°	81.3	73.5	71.9	73.5
77.5°	56.3	54.7	54.7	53.2
80°	37.5	36.0	39.1	34.4
82.5°	23.4	25.0	23.4	25.0
85°	15.6	18.7	17.2	17.2
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)